

IN THE CLAIMS

1. (Currently amended) An optical device ~~intended to~~for ~~treating~~ an incident X-ray beam, said device comprising:

~~□~~ a monochromator ~~(M)~~; and

~~□~~ an optical element ~~(20)~~ for conditioning the incident X-ray beam, ~~whose the optical element including an X-ray reflective surface is able~~ having a multilayer structure to produce a two-dimensional optical effect in order to adapt a beam directed towards ~~in destination of the monochromator, said optical element comprising a surface reflective to X-rays of the multilayer structure type,~~

~~characterised by the fact that~~wherein said reflective surface consists of a single surface, said reflective surface being shaped according to two curvatures corresponding to two different directions.

2. (Currently amended) A ~~The optical device according to the preceding claim 1, characterised in that~~wherein said single reflective surface is of the ~~a~~ multilayer type with a lateral gradient.

3. (Currently amended) A ~~The optical device according to one of the preceding claims~~claim 1, characterised in thatwherein the single reflective surface comprises a depth gradient.

4. (Currently amended) A ~~The optical device according to one of the preceding claims~~claim 1, characterised in thatwherein said reflective surface is shaped in each of the said two different directions in order to produce two respective one-dimensional effects.

5. (Currently amended) A ~~The optical device according to one of the preceding claims~~claim 1, characterised in thatwherein said reflective surface has a geometry which is substantially circular in a first direction and substantially parabolic in a second direction.

6. (Currently amended) A—The optical device according to ~~the preceding claim 5~~, ~~characterised in that~~wherein said first direction is ~~the a~~ saggital direction of the optical element and the second direction is ~~the a~~ meridional direction of the optical element.

7. (Currently amended) A—The optical device according to ~~one of Claims claim 1 to 4~~, ~~characterised in that~~wherein said reflective surface has a substantially toroidal geometry.

8. (Currently amended) A—The optical device according to ~~one of Claims claim 1 to 4~~, ~~characterised in that~~wherein said reflective surface has a substantially paraboloidal geometry.

9. (Currently amended) A—The optical device according to ~~one of Claims claim 1 to 4~~, ~~characterised in that~~wherein said reflective surface has a substantially ellipsoidal geometry.

10. (Currently amended) A—The optical device according to ~~one of the preceding claims claim 1~~, ~~characterised in that~~wherein said reflective surface is able to reflect rays of ~~the~~ lines Cu-K $\alpha$  or Mo-K $\alpha$ .

11. (Currently amended) A—The optical device according to ~~one of the preceding claims claim 1~~, ~~characterised in that~~wherein the monochromator ~~is~~ comprises a germanium crystal, and the optical ~~eonditioning~~ element comprises a W/Si multilayer coating with a lateral gradient.

12. (Currently amended) A—The optical device according to ~~one of the preceding claims claim 1~~, ~~characterised in that~~wherein the optical element of the optical device has a length of around 2 cm, said optical device being ~~able to be used~~usable with a source of X-rays ~~whose~~ having a size is of around a few tens of microns by a few tens of microns, in order to produce a sample spot of around 300\*300 microns.

13. (New) The optical device according to claim 4, wherein a first one of the one-dimensional effects is a collimation.

14. (New) The optical device according to claim 13, wherein

a second one of the one-dimensional effects is a collimation or a focusing.

15. (New) The optical device according to claim 1, wherein said reflective surface has a geometry defined by an open or closed curve different from a circle in a first one of the directions and substantially parabolic in a second one of the directions.

16. (New) The optical device according to claim 1, wherein said reflective surface has a geometry substantially elliptical in a first one of the directions and substantially parabolic in a second one of the directions.

17. (New) The optical device according to claim 1, wherein said reflecting surface has a geometry substantially parabolic in the two different directions.